## PHASE CHART

I. GENERAL:

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT MD 672 (GREENBURY POINT ROAD) AND KINKAID ROAD IN ANNAPOLIS. ANNE ARUNDEL COUNTY.

MD 672 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

II. INTERSECTION OPERATION:

THE INTERSECTION OPERATES IN A NEMA 3 PHASES OPERATION WITH THE EAST AND WEST APPROACHES OF MD 672 OPERATING CONCURRENTLY. THE NORTHBOUND KINKAID ROAD MOVEMENT WILL OPERATE WITH A CONCURRENT RIGHT TURN FROM THE EASTBOUND MD 672.

A NEMA SIX-PHASE. FULL-ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A BASE-MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

## PROJECT CONTACTS

THE CONTACT PERSONS FOR THE SHA ARE AS FOLLOWS:

KIMBERLY TRAN ASSISTANT DISTRICT ENGINEER TRAFFIC PHONE: 410-841-1003

JOHN MAYS ASSISTANT DISTRICT ENGINEER MAINTENANCE PHONE: 410-841-1039

JOE HORTY ASSISTANT DISTRICT ENGINEER UTILITIES PHONE: 410-841-1005

JAMES FOLDEN ASSISTANT DISTRICT ENGINEER CONSTRUCTION PHONE: 410-841-1031

ROBERT SNYDER ASSISTANT DIVISION CHIEF TRAFFIC OPERATIONS PHONE: 410-787-7631

EUGENE BAILEY TEAM LEADER SIGN OPERATIONS PHONE: 410-787-7676

EDWARD RODENHIZER TEAM LEADER SIGNAL OPERATIONS PHONE: 410-787-7652

## EQUIPMENT LIST "C"

SHA SHALL REMOVE CONTROLLER AND ANY AUXILIARY EQUIPMENT FOR EXISTING CABINET. THE CABINET AND ALL OTHER REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EA	NEMA BASE MOUNTED CABINET AND CONTROLLER
9086	1 EA	VIDEO DETECTION INTERFACE UNIT: 1-4 CAMERA
9570	30 SF	SHEET ALUMINIUM GROUND MOUNTED SIGNS  1 EA R1-2 (36" x 36")  2 EA R5-1 (30" x 30")  SHIELD ASSEMBLY SIGN  1 EA "EAST. MD 672. RIGHT ARROW" (51" x 24")
9571	31 SF	SHEET ALUMINIUM SIGNS POLE MOUNTED  SHIELD ASSEMBLY SIGN  1 EA "WEST. MD 672. RIGHT ARROW" (75" × 36")
		1 EA D-3(1) "KINKAID ROAD. RIGHT ARROW" (16" × VAR) 1 EA D-3(1) "LEFT ARROW. KINKAID ROAD" (16" × VAR) 1 EA D-3(1) (DUAL FACE) "GREENBURY POINT ROAD" (16" × VAR)

## EQUIPMENT LIST "B"

DESCRIPTION

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

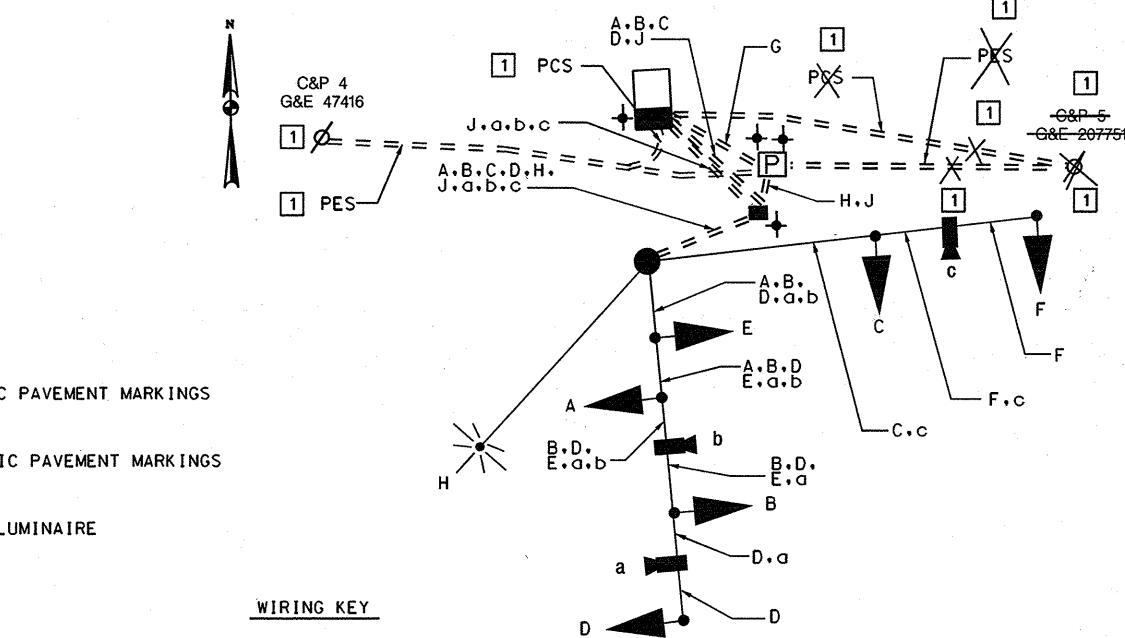
QUANTITY

ITEM NO.

A I LIM IVO	COAIT						
1001	2	EA	MAINTENANCE OF TRAFFIC				
2002	1	CY	TEST PIT EXCAVATION				
5001	50	LF	5" HEAT APPLIED WHITE OR YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT				
5002	150	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH				
5005	34	LF	24" HEAT APPLIED WHITE OR YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMEN				
8001	20	EA	12" LED SIGNAL HEAD SECTION				
8007	1	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE				
8022	1	EA	REMOVE AND DISPOSE OF EXISTING EQUIPMENT (PER ASSIGNMENT)				
8025	1	EA	TWIN MAST ARM POLE AND 50 FT/50 FT MAST ARMS. ANY 'T' DIMENSION				
8026	3	EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT				
8035 1 1	50 1	LF	UP TO 4" SCHEDULE 80 RIDIG PVC CONDUIT - TRENCHED				
8037	79	LF	WOOD SIGN SUPPORT UP TO 4" X 6"				
8039	61	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)				
8041	30	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE				
8043	1.	EA	METERED SERVICE PEDESTAL EMBEDDED				
8045	80	LF	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG - THHN/THWN				
8047	1	EA	ELECTRICAL HANDHOLE				
8052	2	EA	CUT. CLEAN. GALVANIZE. AND CAP TRAFFIC SIGNAL STRUCTURE				
8056	70	LF	ELECTRICAL CABLE - 5 CONDUCTOR NO 14 AWG				
8057	310	LF	ELECTRICAL CABLE - 7 CONDUCTOR NO 14 AWG				
8058	80	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO 12 AWG TC				
8065	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT				
1 8036	50	LF	UP TO 4" SCHEDULE 80 RIDIG PVC CONDUIT - BORED				

	R Y G	R Y G G	R Y G	R	R Y G	R	
Phase 2 + 6	G	G	G	G	R	R	<b>₫</b>
2 & 6 Change	Y	Y	Υ Υ	Y	R	R	
Phase 4	R	R/-G▶	R	R	G	G	<b>一</b> 个
4 Change	R	R/-Y▶	R	R	Y	Y	•
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	<b>→ → → → → → → → → →</b>

• OVERLAP FOR EASTBOUIND RIGHT-TURN.



ELECTRICAL CABLE 7-CONDUCTOR A.B.C.D-

ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG) ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 AWG) - THHN/THWN

ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 AWG) TC

NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

d.b.c - VIDEO DETECTOR CABLE

PROPOSED ELECTRICAL SERVICE PROPOSED COMMUNICATION SERVICE

METERED SERVICE PEDESTAL PROPOSED HANDHOLE

GROUND ROD 3/4 " DIA x 10' LENGTH

1 TEDD RED LINE #1 11/3/2008

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 672 (GREENBURY POINT ROAD) AT KINKAID ROAD IN ANNAPOLIS, MD

**CENTURY** ENGINEERING

CONSULTING ENGINEERS - PLANNERS 10710 GILROY ROAD HUNT VALLEY, MD 21031

DESIGNED BY E.N.B. DRAWN BY E.N.B. F.A.P. NO.\_\_\_\_ DRAWING NO. TS-10078

SCALE NONE DATE 3/2008 CONTRACT NO. AT9155185 COUNTY \_\_\_\_ANNE\_ARUNDEL LOGMILE 02067200.12 CHECKED BY T.I.M.S. NO. <u>H 770</u> TOD NO.\_\_\_ SHEET NO. 2 OF 2

GENERAL INFORMATION SHEET

PLOTTED: \$DATETIME\$
FILE: \$FILE\$